

Decisions Without Direction

*Career Guidance and Decision-Making
Among American Youth*

Comprehensive Report and Data Summary

Conducted for Ferris State University's
Career Institute for Education and Workforce Development,
in partnership with the National Association of Manufacturers,
the Precision Metalforming Association Educational Foundation and
the Associated Equipment Distributors Foundation

May 2002

Overview

Following a series of four pioneering studies of the post-high-school plans of Michigan young people conducted in spring and fall of 2000 for the Ferris State University Partnership for Career Decision-Making (www.ferris.edu/partnership/), EPIC-MRA was commissioned to complete a study of the attitudes and career plans of the nation's high-school juniors and seniors. The study was commissioned by Ferris State University's new Career Institute for Education and Workforce Development with support from the National Association of Manufacturers, the Precision-Metalforming Association and Associated Equipment Distributors.

As the Michigan results suggested, this national survey shows that most young people nationwide plan to pursue a four-year degree in college, then follow their hearts into a career that appeals to them on a personal level. The telephone survey of 809 high-school juniors and seniors was conducted in Fall 2001. The survey has a range of error of ± 3.5 percent.

Methodology

Lansing, Mich.-based research consultants EPIC-MRA administered interviews with 809 currently enrolled high-school juniors and seniors from across the United States in October and November 2001. Respondents were selected using an interval method of randomly selecting records of households in the U.S. The sample was stratified so that every area of the country is represented in the sample according to its contribution to the general population.

All surveys are subject to error; that is, the results of the survey may differ from those which would have been obtained if the entire populations were interviewed. The size of the sampling error depends on the total number of respondents in the particular question. For example, 54 percent of the 809 respondents said both their parents have been primarily responsible for helping them plan for a career or job (Question 10). This percentage would have a sampling error of plus or minus 3.5 percent. That means that with repeated sampling, it is very likely (95 times out of every 100), that the percentage

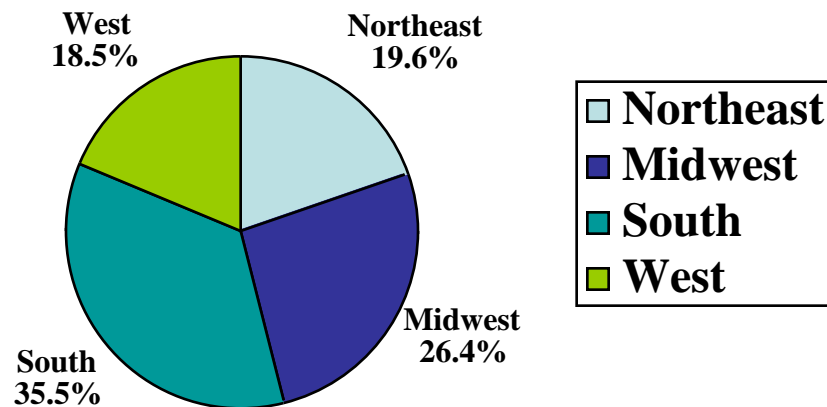
for the entire population would fall between 50.5 percent and 57.5 percent, hence 54 percent ± 3.5 percent.

Demographics

Young people who responded to this survey were perfectly divided between males (50 percent) and females (50 percent), and nearly evenly divided between high-school juniors (47 percent) and seniors (53 percent)¹. They ranged in age from 14-20 years. In contrast to our Michigan studies, this time we only talked to young people currently enrolled in school.

The sample was stratified to reflect the population distribution by state. For purposes of this analysis, we've aggregated the states into the familiar regions.

Regional Distribution of Respondents



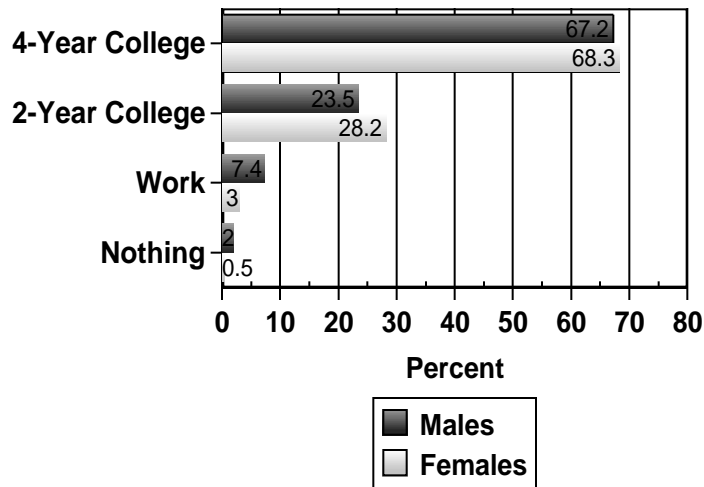
¹All percentages in the text are given to the nearest whole percent.

Four-year bias confirmed nationwide

As we found in our 2000 survey in Michigan, more than nine out of 10 nationwide (94 percent) say some kind of post-secondary education figures in their plans. For two-thirds (68 percent) it'll be a four-year college or university, while another one-fourth (26 percent) will attend a two-year community college or technical trade school. Only a handful—6 percent—plan no further schooling.

We found this trend holds true in broad terms across the board. However, some marginal differences associated with gender, race and location make the details interesting. For example, both males and females are heavily oriented toward post-secondary education, but girls slightly but significantly ($p \chi^2 = .004$) exceed the boys in their zeal for more schooling after high school.

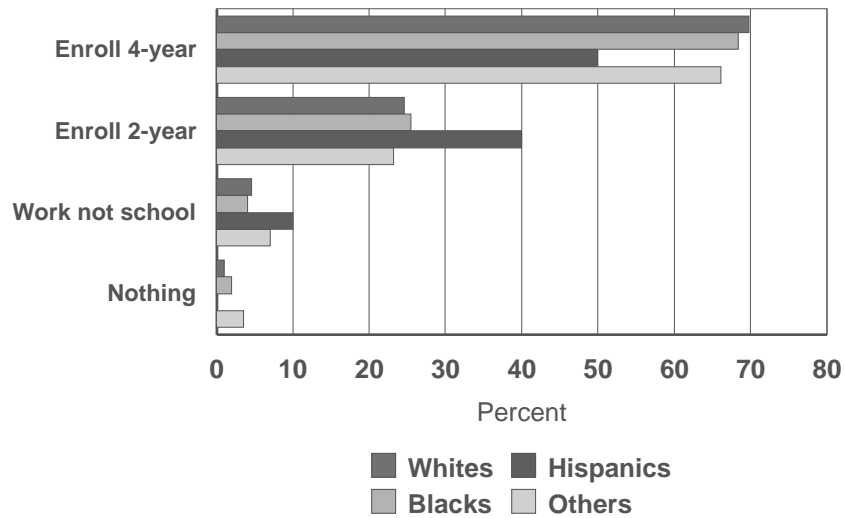
**Which of the following comes closest to describing
what you expect to do after graduation from high school?
By gender (n = 809)**



Males n = 405
Females n = 404

Note in particular that 28 percent of girls plan on a two-year post-secondary educational experience, versus only 24 percent of boys. On the other hand, only 3 percent of female respondents plan to join the workforce right out of school, compared to 7 percent of males. As with gender, so with race/ethnicity. The general trend is toward post-secondary education for the great majority, and this holds for all racial and ethnic groups. Still, some differences ($p \chi^2 = .066$) can be observed. Specifically, Hispanics are much less likely than whites or blacks to be headed toward a four-year post-secondary school, and much more likely to favor a two-year school. The following chart compares four racial and ethnic groups.

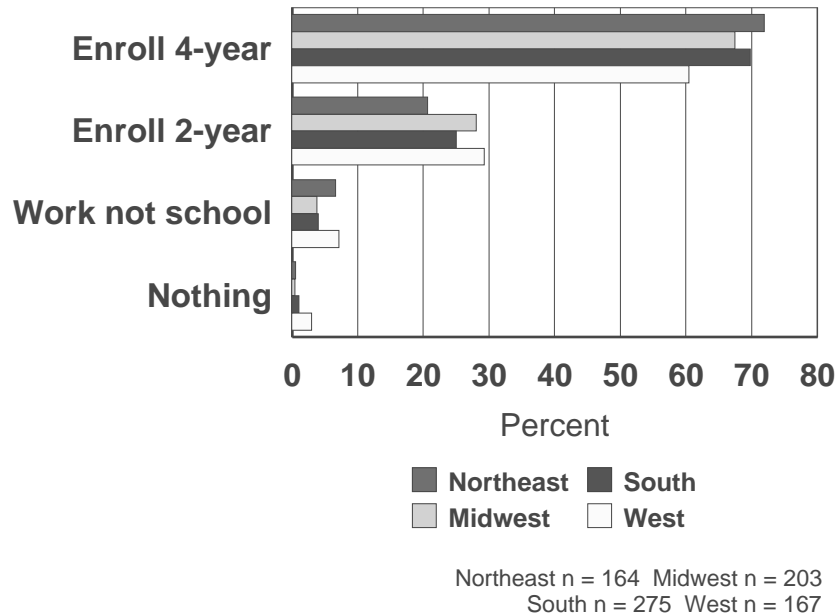
Which of the following comes closest to describing what you expect to do after graduation from high school?
By racial/ethnic group (n = 803)



Whites n = 589
 Blacks n = 98
 Hispanics n = 60

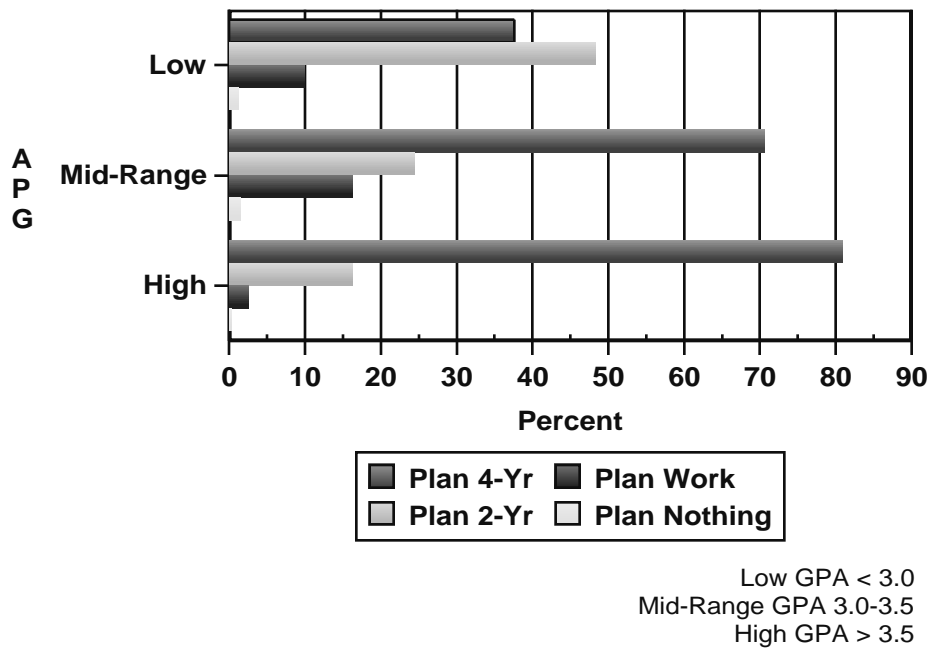
The data also suggest, though not conclusively ($p \chi^2 = .129$), that there are some marginal differences in post-high-school plans in different regions of the country. Again, the overwhelming trend everywhere is to attend college, but the college of choice is more likely to be a four-year school in the Northeast than elsewhere and more likely to be a two-year school in the West than elsewhere. This finding may be related to ethnicity, as well, since Hispanics are more heavily represented in the West.

**Which of the following comes closest to
describing what you expect to do after graduation from high school?
By geographic region (n = 809)**



As we found in Michigan, a student's grades also are strongly linked to his or her plans. Some students at every GPA level aspire to college, and some at every level have no plans for post-secondary education. But the likelihood of a particular preference changes dramatically with GPA.

How GPA affects students' choices (n = 773)



Students with high GPAs (above 3.5) are overwhelmingly likely to plan on further education (either in a two-year or a four-year institution) as opposed to work or something else – the ratio is 35 to 1. Students with low GPAs (in the 1.0-2.9 range) also prefer college to work or something else, but by only a 6 to 1 ratio. Students in the middle prefer college by a 19 to 1 ratio.

Similarly, the selection of a four- or two-year school is strongly related to GPA. High-GPA students pick four-year schools over two-year schools by 5 to 1. Mid-GPAs also prefer four-year schools, but by only 3 to 1. Low-GPA students, on the other hand,

actually prefer two-year schools, which they pick over four-year institutions by about 1.3 to 1.

It is not surprising that household income also is related to a student's choice. College may not be solely for the rich, but the ranks of those headed for four-year schools are dominated by the upper levels of the income spectrum. Just over three out of five (62 percent) high-school juniors or seniors bound for four-year institutions come from households with incomes of \$60,000 or more, and fully a fourth of them (26 percent) come from households with incomes of \$100,000 or more. Only one four-year-college-bound student in five (21 percent) comes from a household with an income of \$40,000 or less.

Career goals set for most students

Overall more than seven out of 10 (72 percent) of the juniors and seniors surveyed say they've picked out a career to pursue, either right out of high school or after college. There are notable differences, however, from subgroup to subgroup. For example, Hispanic young people are much less likely than all others to have made a career decision – just 57 percent say they have ($p \chi^2 = .004$). Similarly, young people in the West are less likely than others to have made a decision (66 percent, $p \chi^2 = .065$), a finding that also may be related to the fact that Hispanic students are more heavily represented in the West.

A factor that appears to play a strong role in determining which young people are likely to have made a career decision is parental influence. Young people who say they've been most influenced by their mothers are less likely than the overall average to have made a career decision – about 64 percent say they have, vs. the overall average of 72 percent. By contrast, young people who've been most influenced by their fathers are quite a bit more likely than the overall average to have made their choice – 83 percent of such kids say they've picked a career. Young people who say the influence of both parents has been about equal fall in the middle, at 74 percent, or about the overall average ($p \chi^2 = .014$).

Gender of the student appears to have no significant effect on the likelihood of having made a career decision. The difference between a father-influenced student and a mother-influenced student amounts to this: father-influenced young people are 29 percent more likely to have made a career decision.

Students prefer “hi-touch” over “hi-tech”

Our study shows that young people’s preference for careers involving human contact and interaction, which we spotted in Michigan last year, is observable nationwide. Among those who say they’ve made a career decision or are leaning toward a particular career, the top choices are medicine, education, computers, law and business. Looking at the top 11 (since there’s a tie for tenth place), we see a mix of technical and human services fields, with the latter getting the biggest numbers.

The table below shows the aggregate choices of the 72 percent who say they’ve made a definite decision and the additional 15 percent who say they’re leaning toward a choice. These top 11 fields account for just over two-thirds (68 percent) of all career choices or preferences among the nation’s high-school juniors and seniors.

**What career or job have you decided to pursue/are you
most interested in pursuing? (n = 695)**

Health care and medical	21.0%
Education, teaching	9.4%
Computers	6.8%
Law	6.8%
Business	4.7%
Science	4.0%
Engineering	3.2%
Military service	3.2%
Veterinary, animals	3.2%
Automotive	2.7%
Art	2.7%

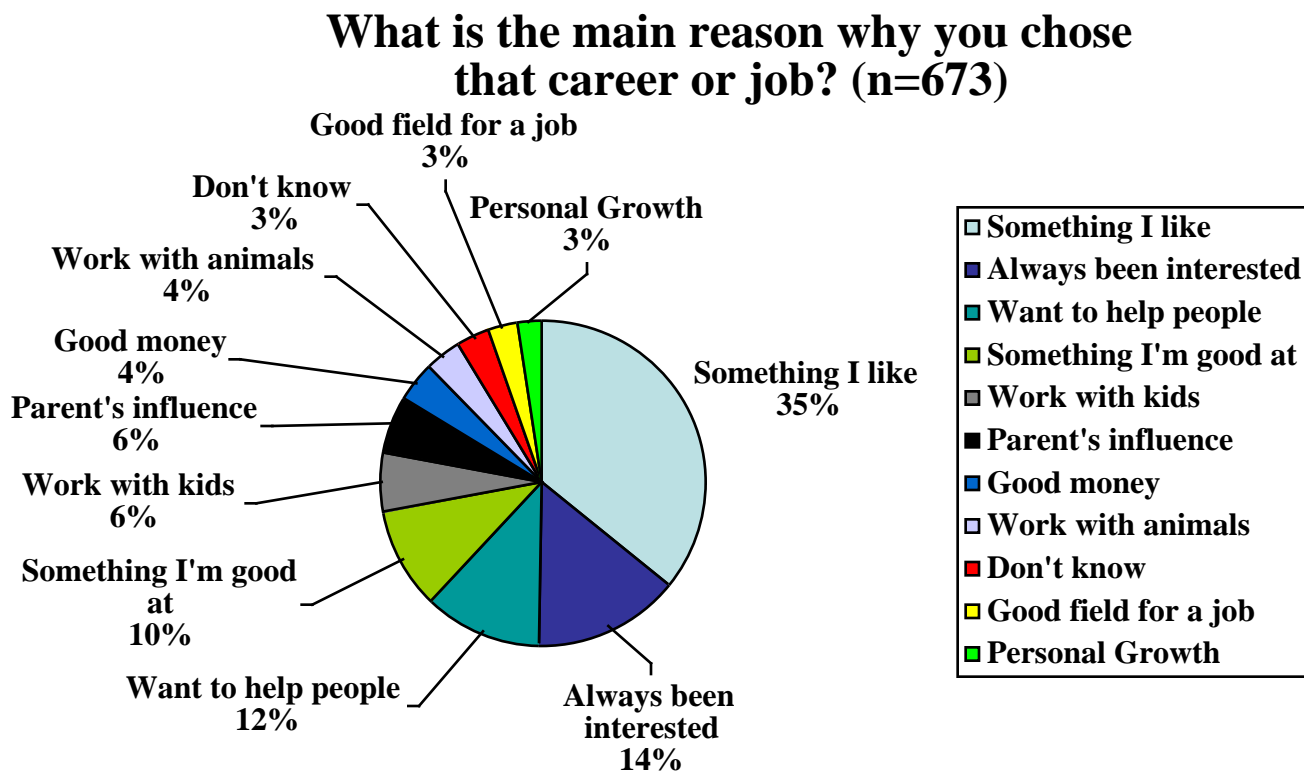
There are strong trends in the data, particularly when we focus on the top five choices. Collectively they represent the futures of about two young people out of five (42 percent). There is no question that young men and women have different career preferences. Health care, the leading choice overall, appeals strongly to both groups but more so to young women than young men. It is the choice of more than half (53 percent) of the young women whose choice is among the top five, whereas it is chosen by less than a third (30 percent) of the young men with a top-five preference. Education and business both appeal about equally to both groups. On the other hand, law and computers hold much stronger attractions for young men than for young women. The table below sets out the differences ($p \chi^2 = .000$).

Choices of young people who prefer a top-five career selection
By gender (n = 338)

<i>Career Selection</i>	<i>Males</i>	<i>Females</i>	<i>Overall</i>
Health care and medical	29.8%	52.8%	43.2%
Education, teaching	16.3%	21.3%	19.2%
Computers	19.9%	9.6%	13.9%
Law	24.1%	6.6%	13.9%
Business	9.9%	9.6%	9.8%
TOTAL	100.0%	100.0%	100.0%

Most choose personal interest over practicality

The choice of a career is influenced by many factors that undoubtedly interact in complicated ways. Here are the factors the young people themselves said were most influential in their choice of (or decision to lean toward) a career.



We can divide these responses into two groups. The young person interested in becoming a teacher who says that's her choice because she likes kids is expressing the same kind of personal interest in the career as the future engineer who says she's always been interested in the subject or it's something she likes. Those who want work

with animals or help people express the same sort of preference. Young people who gave these responses form a group whose primary attraction to a career is immediate and personal: they feel a kind of calling.

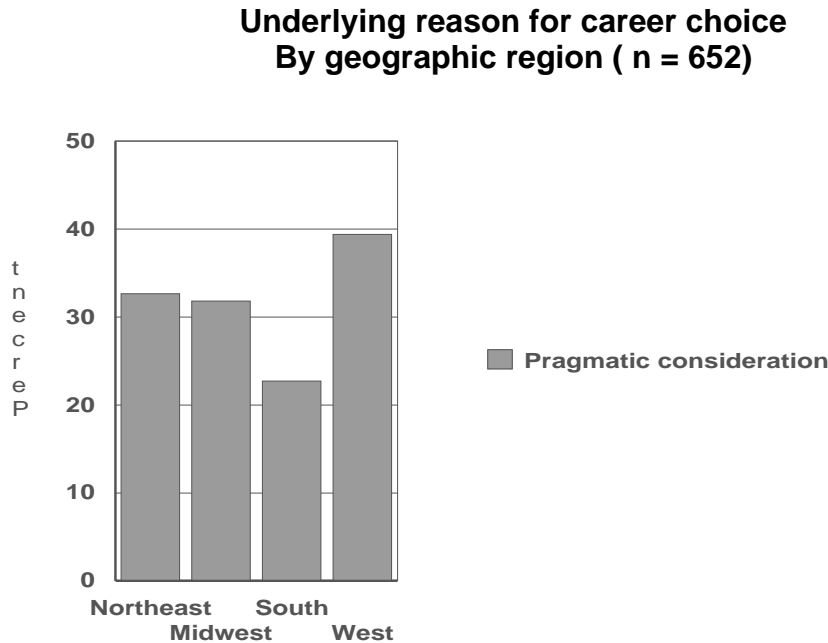
The other young people have a more pragmatic orientation. For some it is a matter of sensing a good fit between their own capabilities and the requirements of the job (“something I’m good at”), for others the field may represent a line of least resistance (“good field for a job,” “parents’ influence”) and for still others the attraction seems purely financial (“good money”).

In Michigan we found these two groups split two-thirds to one-third (66 percent vs. 34 percent), with the larger group choosing a career on the basis of personal attraction. In this study we find the same trend exists nationwide. Overall, 70 percent of our sample cited a reason that we classified as personal attraction as the main reason for their choice of a career, while 30 percent cited a reason that was classified as a pragmatic consideration. This type of analysis is subjective, of course – reasons like “parental influence” could be deeply personal, and the distinction between being interested in a subject and being good at it is not always clear. On the other hand, responses indicating a decision based on the young person’s personal interests or perceived strengths clearly dominate responses based on external factors such as job availability or pay.

Looking closer, we find significant effects due to gender, race, income, geographic region and GPA. Though both sexes are more likely to cite personal attraction over pragmatic consideration as the main reason for their career choice, young men are far less likely to than young women. Among the males, personal attraction predominates over pragmatic considerations by 58 percent to 42 percent – the ratio is about 1.4 to 1. Among females, however, 81 percent cite personal attraction, vs. 19 percent who cite pragmatic considerations, a 4.3 to 1 ratio ($p \chi^2 = .000$).

A student's home turf also seems to have an effect on his or her career choice.

Pragmatism is strongest in the West, weakest in the South, as the following chart shows ($p \chi^2 = .008$).



Note that of the 21 students who say they want to be veterinarians, or otherwise work with animals, every one is motivated by a personal attraction for the field. Students interested in education, science and health care run about nine personalists to one pragmatist. Art, computers and automotive attract about two personalists for every pragmatist. Law and engineering attract both about equally. Business, however, attracts about two pragmatists for every personalist, and the military attracts mostly pragmatists – the ratio is about six to one.

Opportunity knocks, but few answer

Regardless of their career selection, the students were asked to mention several career or job-related areas where they see the *greatest opportunity* for young people today. We can sort these by the numbers of young people mentioning them and compare the list with their own career preferences.

**Perceived opportunity versus interest
for top 11 career selections**

<i>Career Selection</i>	<i>Percent Selecting (A)</i>	<i>Percent Perceiving Opportunity (B)</i>	<i>Ratio B/A</i>
Computers	6.8%	47.6%	7
Business	4.7%	16.8%	3.6
Engineering	3.2%	8.7%	2.7
Education, teaching	9.4%	24.3%	2.6
Health care and medical	21.0%	51.1%	2.4
Military service	3.2%	7.3%	2.3
Law	6.8%	14.7%	2.2
Science	4.0%	6.9%	1.7
Automotive	2.7%	3.4%	1.2
Veterinary, animals	3.2%	0.6%	0.2
Art	2.7%	0.5%	0.2

The column headed “Percent Selecting (A)” has the information already presented for the top 11 career choices. The column headed “Percent Perceiving Opportunity (B)” sets out the proportion of young people who perceive the field as one of those offering the greatest opportunities for young people today (up to four could be mentioned).

In the column headed “Ratio B/A” we give the ratio of the proportion of young people who perceive high opportunity in a given field to the proportion who say they intend to go into the field. This ratio is a measure of the discrepancy between “that’s a great field for someone” and “that’s the field for me.” Values greater than 1.0 mean young people (in the aggregate) perceive an excess of opportunity over interest – such fields have opportunity going begging, and the higher the ratio, the greater the “unpursued opportunity.” At the other end of the scale, values less than 1.0 mean an excess of interest over perceived opportunity.

In an economist's ideal world, all the values would be 1.0, signifying that actual interest was perfectly rationalized with perceived opportunity. Young people would pursue fields in direct proportion to the opportunities they saw in them.

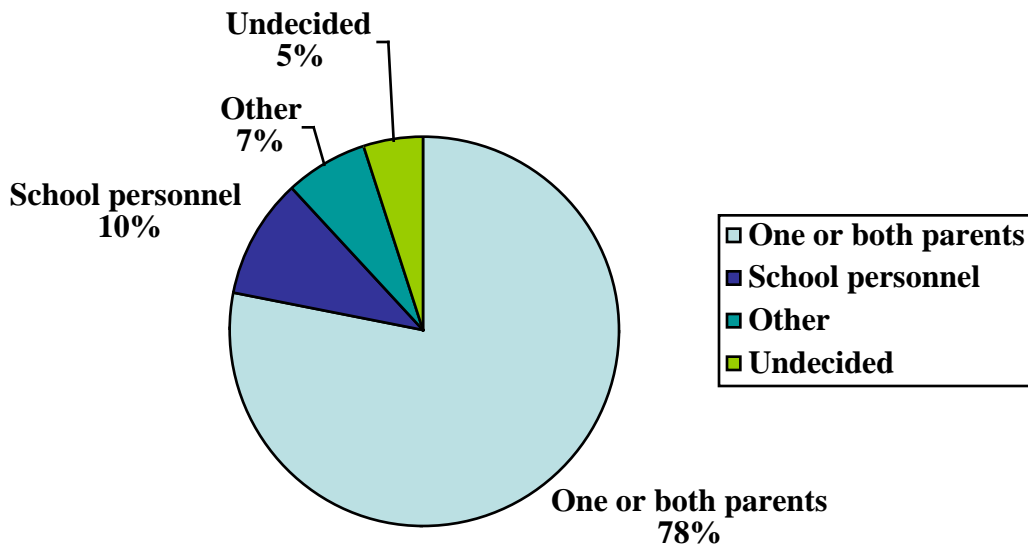
The figures are telling us that for most of the top 11 career choices, young people perceive opportunity aplenty. And it is probably reasonable to assume that perceptions of opportunity are influenced by the *need to perceive* opportunity that a young person typically has. The net effect of these two factors would seem to be illustrated by the many values in the range from 1.7-2.7, or $2.2 \pm .5$. We can take that figure as a kind of norm, or balance point, between the tendency to perceive opportunity in a field and the tendency to have personal interest in it.

The interesting fields are the ones toward the top and bottom ends of the list. At the top, with a ratio of 7 times as much perceived opportunity as expressed personal interest, is the field of computers. The message is, "wonderful opportunity, but not for me." Careers in business, too, substantially exceed the norm in unpursued opportunity. At the bottom of the list are careers in veterinary medicine and other animal-related careers, and careers in art (mostly applied fields, such as graphic design). In these cases, only one student in five who said they were going to pursue them believes they offer good opportunities.

Adults have bigger role to play in career choices

Another factor that influences young people’s career decisions is the advice and counsel they receive from the adults in their lives. For 78 percent, one or both parents are sources of this advice. Ten percent say someone at school, either a teacher or a counselor, is more influential, and a handful (7 percent) say someone else has been helpful.

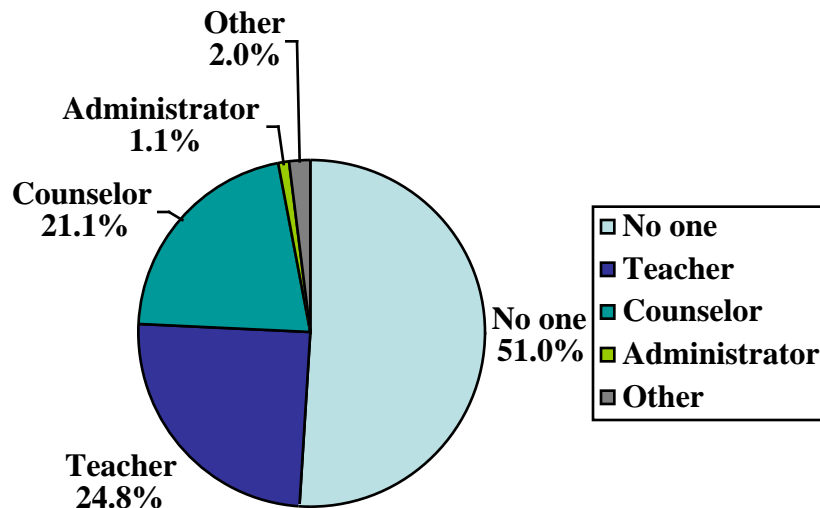
Who is primarily responsible for helping plan for a career or job? (n=809)



Particular attention was focused on the influence of school personnel. Regardless of whether the parents or the school personnel were more influential, the respondents were asked whether someone at school provided helpful career advising. *Fifty-one percent* of young people could identify no one at school who provided this

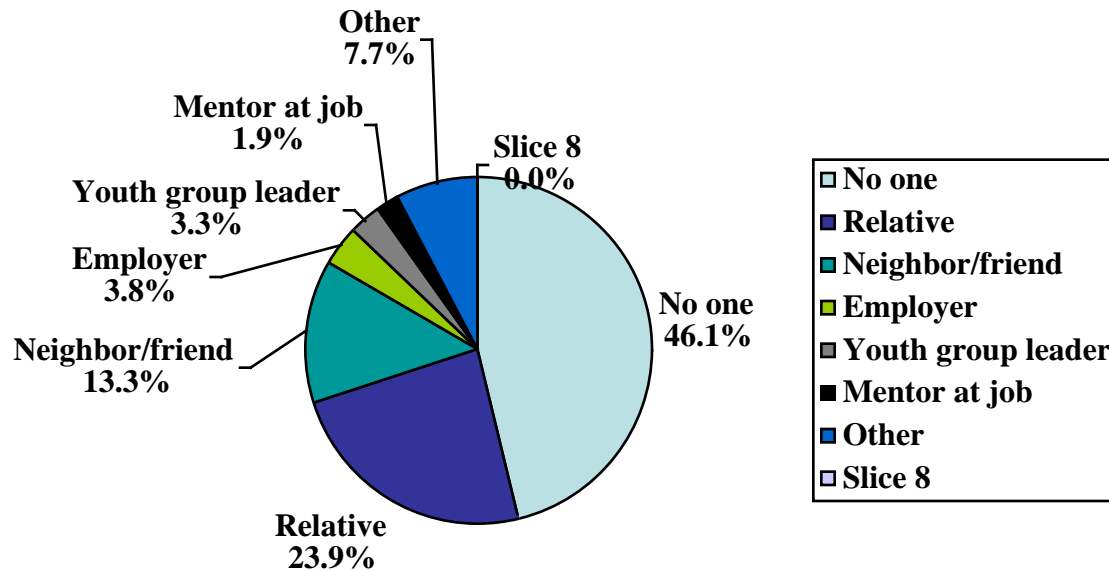
help. Among the 49 percent who said someone at school had helped with career counseling, it appears that teachers are doing more than counselors.

Who in high school has been a mentor or especially helpful in advising on career or job options, or options to further your education past high school? (n=809)



Respondents were also asked whether another adult – neither a parent nor someone associated with school – might have been helpful in the career decision-making process. Again, only about half (53 percent) of the young people surveyed could identify someone in this role.

Who not associated with your school has served as a mentor or been helpful in advising you on career options or options to further your education? (n=809)



Taking into account all the adults who've offered career guidance, almost four out of five young people (79 percent) said the amount that an adult talked to them was "some" or "a lot," while one in five (20 percent) said "only a little" or "not at all." However, since parents are the adult group most students credit as primarily responsible for career counseling, it seems appropriate to look at the amount of time they spend talking careers with their children.

Students were able to name a number of specific activities of their high schools that were helpful in their career decision-making. Here are the top 10 items mentioned.

Can you think of anything your high school did/is doing to help you explore different employment opportunities, careers or jobs? (n = 809)

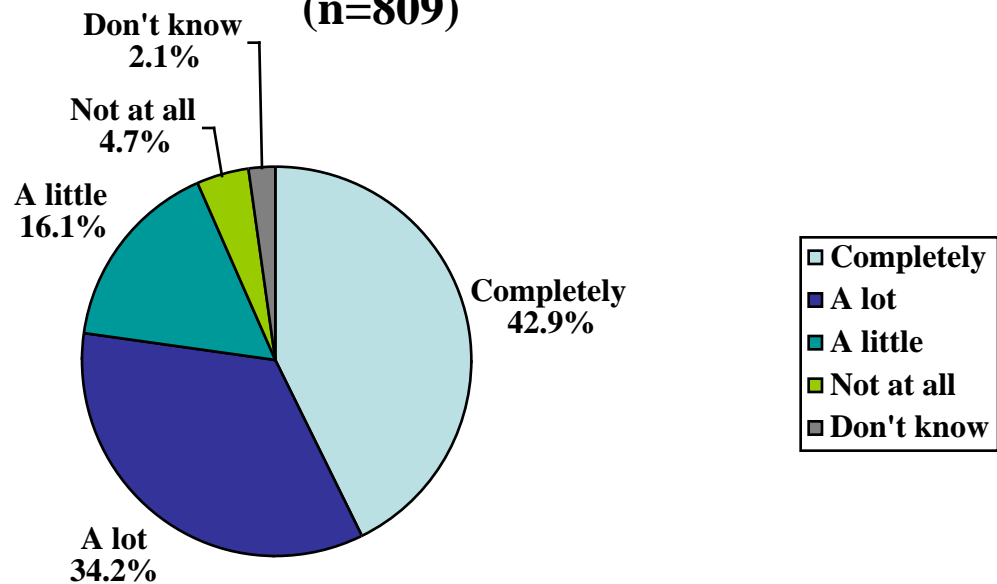
Career classes	14.3%
Career counselor	8.7%
Career day	8.2%
Job fair	6.7%
Career center	6.3%
Career speakers	5.1%
College night	4.7%
Brochures, flyers	3.5%
Testing	3.3%
Internships, apprenticeships	3.0%

It should be noted that one student in five (20 percent) could think of nothing the high school was doing to help with career decision-making. As we noted before in the Michigan study, this seems to be an area with a great deal of untapped potential.

Grades matter

Few young people would dispute the notion that grades in school have something to do with the selection of a career. When the idea is stated as a general proposition, only one in 20 (5 percent) thinks grades have no influence on careers that can be considered.

How much do you think your grades in school influence the type of career or job you can consider? (n=809)



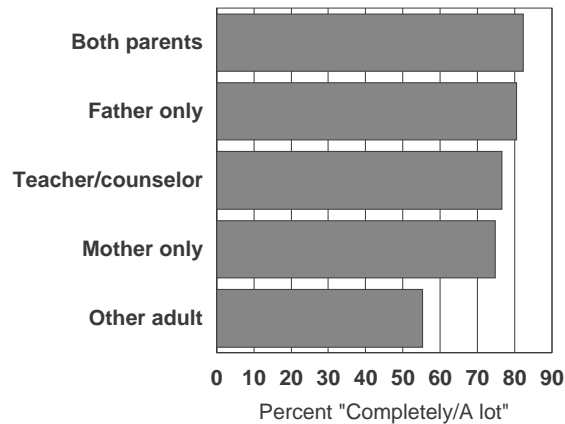
Though the overall trend is to believe that grades matter, we found some marginal differences that suggest subtle but revealing differences in opinions. Growing older seems to have something to do with the perception that grades matter. Among the 14-16 year-olds in the sample, 75 percent say grades matter “completely” or “a lot,” while the 17 year-olds push the figure to 77 percent and the 18-20 year-olds up it to 80 percent ($p \chi^2 = .450$).

A factor that appears to be clearly associated with the perception that grades matter is race/ethnicity. Among the four racial groups, blacks have the greatest tendency to believe grades matter, while Hispanics have the least tendency to believe this ($p \chi^2 = .024$).

Adult influence is another factor that appears to have a definite effect on the perception that grades matter. Young people influenced by both parents have the greatest tendency to believe in the importance of grades, though those influenced primarily by their fathers come in a close second. Those influenced by their mothers only, however, fall below the average, while those influenced by someone other than a

parent or a school person (i.e. a relative, family friend, youth group leader) fall well below it. The chart below shows the differences ($p \chi^2 = .000$).

How much do you think your grades in school influence the type of career or job you can consider, by influencing adult? (n = 767)



As we found last year in Michigan, young people nationwide tend to rate all the courses in the college prep curriculum high in importance. Communications ranks at the head of the list, with foreign languages at the bottom. The table below gives the percentage of young people rating each subject as “very important” or “somewhat important.”

Of the following courses, how important is each in preparing students to get a good job—percent rating “very” or “somewhat important” (n = 809)

Communications, including reading and writing	97%
Mathematics (three years)	88%
English (three years)	87%
Economics and business management	84%
Social studies	80%
Science (two years)	79%
Literature	74%
Foreign languages (two years)	65%

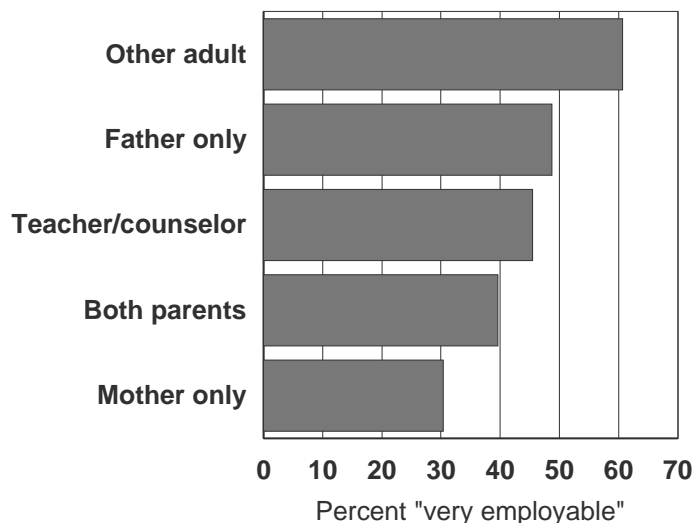
Playing the confidence game

Regardless of the status of their career plans, we asked the young people how confident they would be of getting a job if they entered the job market today. About two out of five (42 percent) said they'd be "very employable," while the majority (58 percent) expressed some degree of doubt, implied by "somewhat employable," "only slightly employable," "not employable at all," or "don't know." There are interesting variations in these responses from group to group.

Females lag males in confidence, by a small but significant amount. Forty-five percent of high-school boys express full confidence in their employability, while among the girls the number is only 39 percent ($p \chi^2 = .054$).

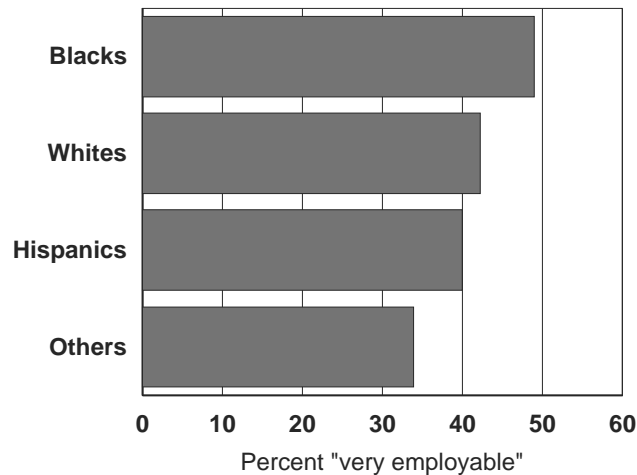
Another trend that's likely to be significant is associated with the influential adult in a young person's life. Among those who identified an adult as being influential (95 percent of the total), those for whom the adult was someone like a family friend, a relative, a youth group leader or a mentor at work expressed the most confidence in their employability. Those for whom the influential adult was a mother only (not both parents) expressed the least confidence in their employability. Here are the details.

Thinking about skills you can offer if you were to enter the job market today, how employable would you consider yourself to be, by influencing adult? (n = 767)



Another factor that appears to affect a youngster's confidence in his or her employability is race. Again, the data are not conclusive, but they point to a trend worth watching. It appears that black young people have high levels of confidence (a healthy sign), but Hispanics and racial "others" lag the overall average ($p \chi^2 = .317$).

Thinking about skills you can offer if you were to enter the job market today, how employable would you consider yourself to be, by race/ethnicity (n = 803)

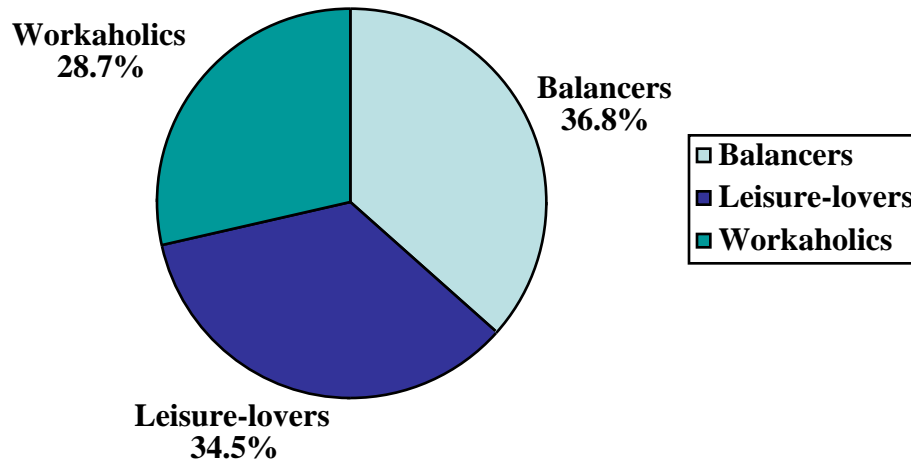


Visions of the good life

Very few young people plan just to get by in life, but on the other hand, not all subscribe to the same vision of what makes for the good life either. We asked which of the following visions of the future young people subscribed to: plenty of money and the free time to enjoy it; plenty of money but work hard to earn it and have less free time; or adequate money with free time to do the things you enjoy.

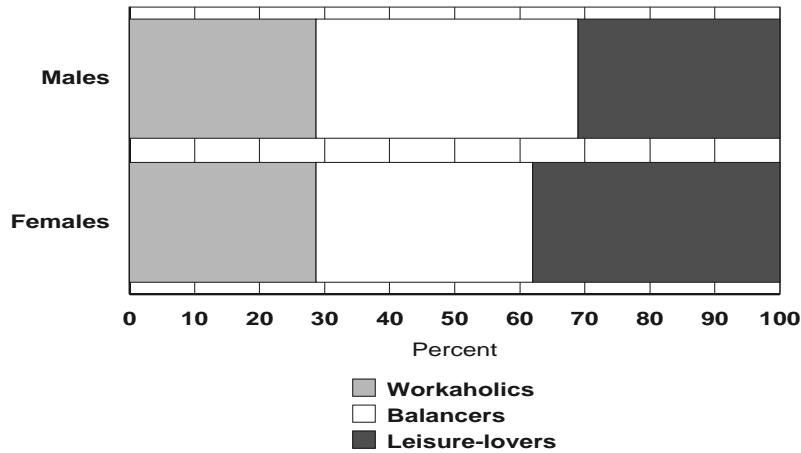
We'll call those who opt for the first view the balancers, those who opt for the second the workaholics and those who opt for the third the leisure-lovers. The students divide almost evenly among the groups.

Which of the following best describes the quality of life you expect? (n=766)



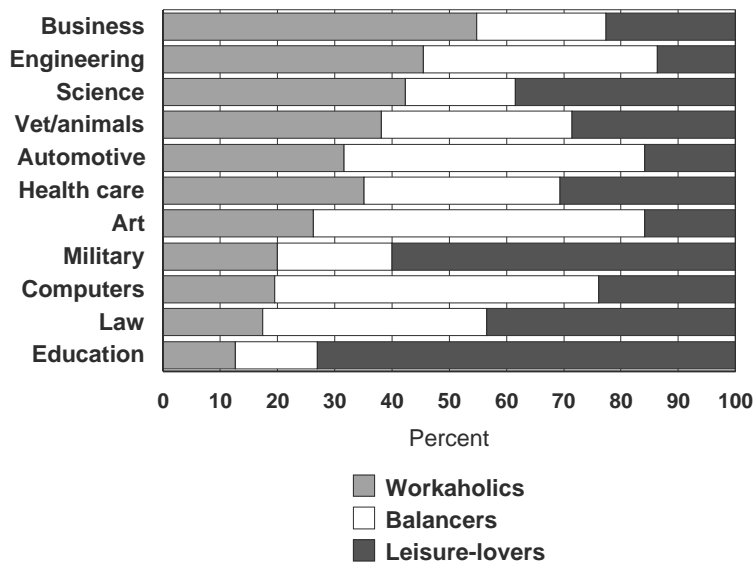
The details, however, make for interesting analysis. To begin with, we can dispense with the stereotype that males are the workaholics among us. The genders are exactly even, at 29 percent, in subscribing to that vision of the good life. The differences between them lie rather in whether the rest tend to opt for balance – as the boys do – or leisure, as the girls do ($p \chi^2 = .071$).

**Which of the following best describes
the quality of life you expect, by gender? (n = 766)**



Are career choices associated with visions of the good life? They certainly are. We don't find many workaholics headed for careers in education – or in law, computers or the military. Plenty of them are going into science, engineering and business ($p \chi^2 = .000$).

**Which of the following best describes
the quality of life you expect, by career choice? (n = 320)**



With the career field's stereotypical free summers, it might not be surprising to see education attracting the highest prevalence of leisure-lovers. What may be surprising is to see nearly the same profile among those attracted by military service: a strong majority of leisure-lovers with the rest evenly divided between balancers and workaholics. Or consider this unlikely trio: art, computers and automotive careers. They share a profile in which balancers make up the majority, with the others about evenly divided between workaholics and leisure-lovers.

Attitudes toward technical training improving?

A battery of questions designed to get at young people's overall attitudes about the role of technical training provide an interesting point of reference between the present survey and the one done in Michigan in early 2000. In particular, some attitudes toward technical training and technical careers may be shifting to the more positive end of the spectrum. Note the numbers in boldface in the right-hand column below, which records figures from the present survey.

Percent of high-school students who agree with each statement
(Michigan study n = 450; National study n = 809)

<i>Statement</i>	<i>Percent who agree Michigan study</i>	<i>Percent who agree National study</i>
The best jobs and careers require at least a 4-year college education.	71%	68%
There are plenty of good-paying high-tech jobs available that only require 2 or 3 years of job training and pay as much as \$40,000 to \$80,000 per year.	74%	72%
Even though jobs in the health care industry pay well and offer good benefits, mergers and layoffs in the health care industry make the future of health care jobs less secure than other jobs.	51%	40%
There is a sense of embarrassment associated with vocational job training programs and college courses that make them less attractive than 4-year college degrees.	42%	41%
Pursuing technical careers may provide high paying jobs, but when students take job-training courses, they limit the kind of professional careers they can achieve.	58%	45%
Having training in the use of technology is important today if students are going to have a chance at getting a good paying job.	84%	89%

Among these six questions, the third one probably reflects the influence of yesterday's headlines more than any other factor. It's not surprising that in the spring of 2000 a bare majority of Michigan high-schoolers had their doubts about the strength of healthcare— that survey followed closely on the heels of some widely publicized mergers in large healthcare systems in the state. Today, however, the mergers in healthcare are old news, and the drop in negative responses reflects a more optimistic outlook.

The question about whether technical training limits choice of career shows a distinct shift in outlook. Nationally, young people today are about 22 percent less likely to believe this is so today than they were 18 months ago in Michigan. We also note a warming trend in attitudes toward technical training in the last question. Even more students believe training in technology is important to their employment outlook today than formerly.

Survey Overview and Demographic Analysis

Post-high school expectations

Respondents were asked which of a list of descriptive phrases comes closest to describing what they expect to do after graduation from high school. In rank order, the responses were:

enroll in a 4-year college or university	65%
enroll in a 2-year community college, or technical trade school or program	24
work full or part time, but not attend school after high school	5
neither work nor attend school	1
enroll in a 4-year college or university and also work (<i>volunteered</i>)	3
enroll in a 2-year college or trade school and also work (<i>volunteered</i>)	2
enroll in a 4-year college or university	65

Career/job plans

When asked if they had made a decision about what type of career or job they would like to pursue after high school, respondents answered:

* yes, has made a decision	72%
no, has not made a decision	22
undecided/don't know/unsure	6

* Those who said “yes” were first asked what career/job they have decided to pursue, and then to state the main reason why they chose that career/job:

Career/job chosen

medical	21%	cosmetology	2	forestry	1
education	9	dental	2	graphic design	1
computers	7	electronics	2	marketing	1
legal	7	journalism, writer	2	massage therapist	1
business	5	law enforcement, firefighting	2	ministry, social work	1
engineering	4	music, dance	2	pharmacy	1
military	4	professional sports	2	photography	1
science	4	architecture	1	politics	1
automotive	3	chef, restaurant owner	1	theater	1
finance, accounting	3	child care	1	welding	1
vet, animals	3	farming, agriculture	1	other	1
art	2	fashion/interior design	1		

Reasons for choice

something I like	33%	personal growth	3
always been interested	14	work with animals	3
want to help people	10	family business	2
something I'm good at	9	fun	2
work with kids	6	interaction with people	2
parents influence	5	authority and respect	1
good field for a job	3	good career path to start	1
good money	3	the travel	1
		undecided/don't know/refused	1

-- specific interests, 1st and 2nd choices

All respondents were asked if there is any specific career or job they might be interested in:

yes, is interested in a career or job area	52%
no, is not interested in a career or job area	25
undecided/don't know/unsure	23

* Those who said "yes" were first asked what career or job area they are most interested in pursuing, and then to state the main reason why they chose that career/job:

Career/job chosen

medical	23%	fashion/interior design	3	forestry	2
education	13	law enforcement, firefighting	3	military	2
art	7	music, dance	3	electronics	1
computers	7	photography	3	graphic design	1
legal	7	vet, animals	3	ministry, social work	1
science	5	architecture	2	professional sports	1
journalism, writer	4	cosmetologist	2	theater, drama	1
automotive	3	farming, agriculture	2	welding	1
business	3	finance, accounting	2		

Reasons for choice

something I like	32%	fun	2
want to help people	14	good career path to start	2
something I'm good at	10	work with kids	2
always been interested	8	interaction with people	1
good money	6	the travel	1
work with animals	3	undecided/don't know/refused	14

All respondents were then asked “Is there another career or job area ... you might consider (as a second choice)?”:

medical	15%	architecture	2	chef, restaurant owner	1
education	9	child care	2	communications	1
computers	6	construction	2	cosmetologist	1
law enforcement, firefighting	4	marketing	2	electronics	1
legal	4	military	2	fashion/interior design	1
science	4	ministry, social work	2	pharmacy	1
business	3	politics	2	photography	1
engineering	3	theater, drama	2	professional sports	1
finance, accounting	3	vet, animals	2	other	1
journalism, writer	3	art	1	undecided/don't know/refused	12
music, dance	3	automotive	1		

Influences on career/job planning

-- parental/school

All respondents were asked if one or both of their parents have been “primarily responsible for helping you plan for a career or job,” or if a counselor or teacher in high school has been primarily responsible for providing career- and job-planning assistance:

parent (mother)	14%	78% Total PARENTS
parent (father)	10	
parent – both parents equally (<i>volunteered</i>)	54	
counselors or teachers	10	
other (<i>volunteered</i>)	7	
undecided/don't know	5	

-- in-school mentor

When respondents were asked if there is a particular person in high school who has been a mentor or especially helpful in advising on career or job options, or on options to further education past high school, the answers were:

no one	50%	
yes, a school teacher	26	
yes, a school counselor	21	
yes, a school administrator	1	
* yes, some other person with the school	2	
* [16 respondents]		
	50%	coach
	38	friends
	6	pastor
	6	security guard
undecided/don't know	1	

-- extra-curricular mentor

When asked if a particular person not associated with school has served as a mentor/advisor on career/job options, or in furthering education past high school, respondents said:

no one	45%	
yes, a relative	24	
yes, a respected neighbor or family friend	13	
yes, an employer	4	
yes, person associated w/Scouts - community youth groups	3	
yes, a mentor at a job or co-op position	2	
* yes, some other person liked and respected	8	
* [62 respondents]		
	18%	coach
	18	friends
	13	pastor
	11	social worker
	8	college mentor
	8	doctor
	6	aunt, uncle
	3	my boss
	3	security guard
	3	sibling
	8	other
undecided/don't know	1	

-- extent of parental involvement, opinion of career/job options

All respondents were asked how much time they have spent over the past few months discussing career or job options with one or both of their parents:

less than an hour	11%
about an hour	14
one to three hours	24
more than three hours	30
not at all	18
undecided/don't know	3

Respondents who cited any time increment were asked to identify the top three or four career or job related areas they discussed with their parents:

Areas					Areas				
	1 st	2 nd	3 rd	4 th		1 st	2 nd	3 rd	4 th
medical	20%	19%	20%	12%	theater, drama	2%	2%	2%	3%
education	9	11	6	7	chef, restaurant owner	1	1	2	--
business	6	5	6	7	child care	1	1	1	--
computers	6	5	5	4	cosmetologist	1		--	--
legal	6	6	5	4	dental	1	1	1	1
engineering	3	3	--	5	electronics	1	1	3	3
finance, accounting	3	3	1	3	farming, agriculture	1	--	1	--
military	3	3	3	--	fashion/interior design	1	1	3	--
science	3	4	5	8	graphic design	1	1	1	--
vet, animals	3	3	3	1	marketing	1	1	2	--
architecture	2	3	1	1	ministry, social work	1	2	--	3
art	2	3	1	1	photography	1	1	--	3
automotive	2	2	1	3	clerical	--	1	2	1
construction	2	1	2	--	communication s	--	1		1
journalism, writer	2	1	3	7	forestry	--		1	1
law enforcement, firefighting	2	4	2	8	massage therapy	--	1	--	3
music, dance	2	3	3	7	pilot, airline steward	--	1	1	--
pharmacy	2	1	1		plumber	--		--	--
professional sports	2	1	2	1	politics	--	1	1	4
					real estate	--	--	1	--
					other	1	--	--	--
					undecided/don't know/refused	4	5	10	--

cumulative percentages -- 1st – 4th areas

<i>medical</i>	71%	<i>theater, drama</i>	9%	<i>marketing</i>	4%
<i>education</i>	33	<i>automotive</i>	8	<i>massage therapy</i>	4
<i>business</i>	24	<i>electronics</i>	8	<i>pharmacy</i>	4
<i>computers</i>	24	<i>architecture</i>	7	<i>child care</i>	3
<i>legal</i>	24	<i>art</i>	7	<i>graphic design</i>	3
<i>science</i>	20	<i>ministry, social work</i>	6	<i>communications</i>	2
<i>law enforcement, firefighting</i>	16	<i>politics</i>	6	<i>farming, agriculture</i>	2
<i>music, dance</i>	15	<i>professional sports</i>	6	<i>forestry</i>	2
<i>journalism, writer</i>	13	<i>fashion/interior design</i>	5	<i>pilot, airline steward</i>	2
<i>engineering</i>	11	<i>photography</i>	5	<i>cosmetologist</i>	1
<i>finance, accounting</i>	10	<i>chef, restaurant owner</i>	4	<i>real estate</i>	1
<i>vet, animals</i>	10	<i>construction</i>	4	<i>other</i>	1
<i>military</i>	9	<i>dental</i>	4	<i>undecided/refused</i>	19

These respondents were then asked, “Is there one career or job area that your parents advised you to either pursue or at least consider more than any other?”:

<i>medical</i>	24%	<i>graphic design</i>	2%
<i>education</i>	11	<i>marketing</i>	2
<i>legal</i>	8	<i>pharmacy</i>	2
<i>computers</i>	7	<i>science</i>	2
<i>business</i>	6	<i>chef, restaurant owner</i>	1
<i>engineering</i>	6	<i>construction</i>	1
<i>finance, accounting</i>	4	<i>electronics</i>	1
<i>journalism, writer</i>	4	<i>farming, agriculture</i>	1
<i>law enforcement, firefighting</i>	4	<i>music, dance</i>	1
<i>military</i>	3	<i>politics</i>	1
<i>architecture</i>	2	<i>theater, drama</i>	1
<i>automotive</i>	2	<i>vet, animals</i>	1
<i>dental</i>	2	<i>undecided/don't know/refused</i>	1

They were then asked if there is there one career or job area their parents advised them NOT to pursue or consider:

<i>military</i>	14%	<i>clerical</i>	2%
<i>law enforcement, firefighting</i>	10	<i>counseling</i>	2
<i>art</i>	8	<i>factory</i>	2
<i>professional sports</i>	8	<i>finance</i>	2
<i>fast food</i>	7	<i>liberal arts</i>	2
<i>theater, drama</i>	6	<i>ministry</i>	2
<i>legal</i>	5	<i>modeling</i>	2
<i>medical</i>	5	<i>science</i>	2

construction	4	vet, animals	2
education	4	computers	1
music, dance	4	cosmetology	1
airline industry	2	electronics	1
child care	2	hotel/motel	1
		other	2

Perceived influence of high school grads

All respondents were asked how much they think their grades in school influence the type of career or job they can consider:

completely influence careers or jobs	43%	77% Total
influence a lot	34	COMPLETELY/A LOT
influence a little	16	21% Total
not at all	5	LITTLE/NOT
undecided/don't know	2	

They were then asked if they agree or disagree with the statement “low grades eliminate many careers you can consider”:

strongly agree	63	83% Total
somewhat agree	20	AGREE
somewhat disagree	11	16% Total
strongly disagree	5	DISAGREE
undecided/don't know	1	

Importance college preparatory courses, generally/specific

When asked to state how important college prep courses are in preparing students to get a good job, respondents answered:

very important	60%	87% Total
somewhat important	27	IMPORTANT
only a little important	7	11% Total
not important at all	4	UNIMPORTANT
undecided/don't know	2	

Respondents were then read a list of specific courses that fit in the category of college prep and asked to rate each on its importance in preparing students to get good jobs:

	IMPORTANT			UNIMPORTANT			undecided
	very	somewhat	Total	little	not	Total	
communications including reading and writing	79%	18%	97%	2%	--%	2%	1%
economics and business management	48	36	84	12	4	15	1
three years of English	66	21	87	8	4	12	1
literature	40	34	74	16	9	25	1
three years of math, including such courses as algebra and geometry	66	22	88	7	5	12	--
two years of science, including such courses as chemistry and biology	49	30	79	12	9	21	--
social studies including geography and history	41	39	80	15	4	19	1
two years of foreign languages	37	28	65	16	17	33	2

Extent of conversations about career/education skills/goals/interests

All respondents were asked how much their “parents, family, school counselors, teachers or someone else” has talked to them about their “likes, dislikes, talents, abilities, strengths, weaknesses, hobbies and interests as a way of determining your goals for continuing your education or employability skills”:

a lot	54%	79% Total
some	25	LOT/SOME
only a little	15	20% Total
not at all	5	LITTLE/NOT
undecided/don't know	1	

Assessment of high school assistance

When asked how their high-school staff has helped students with career planning, respondents answered:

a great deal	31%	63% Total
a fair amount	32	GREAT DEAL/FAIR AMOUNT
somewhat	16	
not very much	11	17% Total
not at all	6	NOT MUCH/NOT AT ALL
undecided/don't know	3	
refused	1	

Respondents were then asked, “Can you think of anything your high school is doing to help you explore different employment opportunities, careers or jobs?”:

no	20%	internships, apprenticeship	3
career classes	14	testing	3
career counselor	9	work experience	3
career day	8	clubs	1
job fair	7	college advisors	1
career center	6	college trips	1
career speakers	5	job shadow	1
college night	5	résumé help	1
brochures, flyers	3	ROP program	1
		undecided/don't know/refused	4

Self-assessment of employability

When asked if they consider themselves to be employable considering “the skills you can offer employers if you were to enter the job market today”, respondents answered:

very employable	42	81% Total
somewhat employable	39	VERY/SOMEWHAT
only slightly employable	7	10% Total
not employable at all	3	SLIGHTLY/NOT
undecided/don't know	9	

Those who said they were either employable or not employable were asked to state the reasons they feel this way:

already employed	14%	I just do	1
hard working, dependable	14	not enough skill	8
many skills	13	not much experience	5
good grades	6	need to finish school	3
quick learner	6	not ready to work	3
I'm responsible	3	need college	2
past work experience	3	just decent grades	1
work well with others	3	low level jobs	1
computer skill	2	not motivated	1
many interests	2	young	1
		undecided/don't know/refused	7

Specific career/job paths:**-- reported conversations with parents**

A list of several career areas or job pathways was read to all respondents, who were asked to state whether they recall discussing each area with one or both of their parents:

	Discussed	Not	unde c
Professional and public service careers, such as child and family care, law enforcement, economics, political and social systems, government, the military, education, law and legal studies, and social services	59%	40%	
			1%
Health care careers, such as medicine, dentistry, and nursing pharmacy, sports medicine, veterinary, medical records, pharmaceuticals, and medical devices	56	44	--
Arts and communications careers, such as advertising, architecture, creative writing, fine arts, journalism, graphic design, foreign languages, performing arts and public relations	48	51	1
Business and hospitality careers, such as accounting, finance, tourism, marketing, sales, information systems, business, ownership, administrative support and business management	44	55	1
Manufacturing, technology and engineering careers, such as automotive technology, construction trades, drafting and design, electrical occupations, machine tool, mechanic and repair, plastics mold, tool and die, and welding	40	59	1
Physical science careers, such as chemistry, biotechnology, microbiology, materials science, physics and chemical processing	29	70	1
Natural sciences and resources careers, such as agriculture, earth science, engineering, environmental, fisheries, forestry, geophysics, horticulture, and wildlife management	27	71	2

-- encouragement from parents

As regards the same list of job areas, respondents were asked if one or both of their parents has been encouraging the respondent to consider each job or career area:

	ENCOURAGING			UNENCOURAGING			under 6%
	<i>very</i>	<i>some what</i>	Total	<i>little</i>	<i>not</i>	Total	
Professional and public service careers, such as child and family care, law enforcement, economics, political and social systems, government, the military, education, law and legal studies, and social services							6%
	35%	21%	56%	12%	26%	38%	
Health care careers, such as medicine, dentistry, nursing, pharmacy, sports medicine, veterinary, medical records, pharmaceuticals and medical devices	40	15	55	12	28	40	5
Arts and communications careers, such as advertising, architecture, creative writing, fine arts, journalism, graphic design, foreign languages, performing arts and public relations	27	16	43	13	38	51	6
Business and hospitality careers, such as accounting, finance, tourism, marketing, sales, information systems, business, ownership, administrative support and business management	22	17	39	17	37	54	7
Manufacturing, technology and engineering careers, such as automotive technology, construction trades, drafting and design, electrical occupations, machine tool, mechanic and repair, plastics mold, tool and die, and welding	21	15	36	10	47	57	7
Physical science careers, such as chemistry, biotechnology, microbiology, materials science, physics and chemical processing	21	12	33	10	48	58	9
Natural sciences and resources careers, such as agriculture, earth science, engineering, environmental, fisheries, forestry, geophysics, horticulture, and wildlife management	14	12	26	12	53	65	9

High school job/career preparation programs

All respondents were asked if their high school has a program that “provided you with any information or instruction on how to look for and get a job; such as teaching you what to expect in a job interview, how to write a résumé, or how to conduct a job search?”:

yes, provided a program, information or instructions	73
no, did not provide a program, information or instructions	23
undecided/don't know	4

They were then asked to rate the information and instruction they have received from their school about employment opportunities:

excellent	21%	70% Total
pretty good	49	POSITIVE
only fair	14	21% Total
poor	7	NEGATIVE
undecided/don't know	9	

When asked how satisfied they are with the job their high school has done preparing them for the world of work, respondents answered:

very satisfied	32%	74% Total
somewhat satisfied	42	SATISFIED
somewhat dissatisfied	7	12% Total
very dissatisfied	5	DISSATISFIED
undecided/don't know	14	

Those who said either “satisfied” or “dissatisfied” were asked to state the reason they feel that way:

<u>Reasons why “satisfied”</u>		<u>Reasons why “dissatisfied”</u>	
good education	13%	no help at all	27%
very helpful	12	could have done more	18
teachers care	9	lack of information	17
teach job skills	8	not enough practical learning	12
lots of information	7	I'm not prepared	8
they prepare you	7	no encouragement from teachers	7
career planning, counselors	6	just push you toward 4-year college	4
many opportunities	6	not challenging enough	4
résumé help	6	no follow through	2
mock interviews	5	need more computer skills	1
they could do more	3		
career day	2		
give much support	2		
job fairs	2		
I feel confident	1		
know how to do a job search	1		
need to finish high school	1		
teach responsibility	1		
visits to work sites	1		
undecided/don't know/refused	5		

Anticipated college requirements for career/job purposes

All respondents were asked if, based on the kind of career or job they are interested in, they will need a college education of four-years or more, a two- or three-year education or training program, “or do you think that education past high school is not really necessary for the career or job you want?”:

a four-year/more college or university	73%
a two- or three-year education or training program	19
no post-high school education	4
undecided/don't know	4

Salary, quality of life expectations

Respondents were asked to identify the levels of wages they expect to earn in their first job:

\$5 per hour or about \$10,000 per year	5%
\$7.50 per hour or about \$15,000 per year	12
\$10 per hour or about \$20,000 per year	17
\$15 per hour or about \$30,000 per year	13
\$20 per hour or about \$40,000 per year	13
\$25 per hour or about \$50,000 per year	10
\$30 per hour or about \$60,000 per year	9
more than \$30 per hour or about \$60,000 per year	10
undecided/don't know	11

After being told, "Quality of life can be measured by the amount of free time and extra money people have to do the things they enjoy doing," respondents were asked which of a series of descriptions best describes the quality of life they expect based on the type of career or job they plan to pursue:

have plenty of extra money and free time to enjoy it	35%
have plenty of money, but work hard to earn it, with less free time	27
have lots of free time by working fewer hours, but only have some extra money	5
have adequate money and free time to do some of the things you enjoy	28
or have just enough free time and money to get by	3
undecided/don't know	2

Influence of familial employment of career/job plans

When asked how much the careers or occupations of their parents or other family members has influenced their choice about what kind of career or job to pursue, respondents answered:

a lot	38%	64% Total
some	26	A LOT/SOME
only a little	15	35% Total
not at all	20	LITTLE/NOT
undecided/don't know	1	

Assessing influence of societal opinion/employer requirements of career/job plans

All respondents were asked which is the more important influence on the kind of careers or jobs students pursue — “the influence of society on the kind of careers or jobs that are most desirable or socially acceptable, or the influence of employers on the kind of careers or jobs that are most needed in the workplace?”:

the influence of society	36%	
the influence of employers	17	
both equally	37	<i>(volunteered)</i>
undecided/don't know	10	

Perceived purpose of education: employment or self-fulfillment

Respondents were asked, “Do you think that you need a quality education to get a good job, or do you want a quality education for self-fulfillment?”:

needs a quality education for a good job	48%	
wants a quality education for self-fulfillment	14	
need a good education for both equally	35	<i>(volunteered)</i>
undecided/don't know	3	

Assessment of careers/jobs with greatest opportunities

When asked to identify the top three or four career or job-related areas that have the greatest opportunities for students, respondents answered:

Areas			Areas		
	1 st	2 nd		1 st	2 nd
computers	26%	15%	construction	1%	2%
medical	21	24	cosmetologist	1	--
education	8	11	finance, accounting	1	2
business	6	6	law enforcement, firefighting	1	2
legal	4	7	marketing	1	3
engineering	3	3	music, dance	1	--
military	3	2	professional sports	1	--
chef, restaurant owner	2	1	science	1	3
architecture	1	1	electronics	--	1
automotive	1	2	ministry, social work	--	1
clerical	1	--	politics	--	1
communications	1	2	other	1	1
			undecided/don't know/refused	12	5
<i>cumulative percentages -- 1st – 4th areas</i>					
<i>medical</i>	<i>45%</i>		<i>engineering</i>	<i>3%</i>	
<i>computers</i>	<i>41</i>		<i>finance, accounting</i>	<i>3</i>	
<i>education</i>	<i>19</i>		<i>law enforcement, firefighting</i>	<i>3</i>	
<i>business</i>	<i>12</i>		<i>architecture</i>	<i>2</i>	
<i>legal</i>	<i>11</i>		<i>clerical</i>	<i>1</i>	
<i>military</i>	<i>5</i>		<i>cosmetologist</i>	<i>1</i>	
<i>marketing</i>	<i>4</i>		<i>electronics</i>	<i>1</i>	
<i>science</i>	<i>4</i>		<i>ministry, social work</i>	<i>1</i>	
<i>automotive</i>	<i>3</i>		<i>music, dance</i>	<i>1</i>	
<i>chef, restaurant owner</i>	<i>3</i>		<i>politics</i>	<i>1</i>	
<i>communications</i>	<i>3</i>		<i>professional sports</i>	<i>1</i>	
<i>other</i>	<i>2</i>				
<i>undecided/don't know/refused</i>	<i>17</i>				

Anticipated source of job search assistance/information

Respondents were asked which of a list of sources of assistance or job information will be the first place they will utilize when they decide to go looking for a job:

<u>1st Choice</u>		<u>2nd Choice</u>	
searching the Internet	33%	seeking assistance from employment agencies	27%
reading the classified ads	22	reading the classified ads	22
by talking to friends	19	searching the Internet	21
seeking assistance from employment agencies	17	by talking to friends	18
someplace else	7	someplace else	3
undecided/don't know	2	undecided/don't know	9

Influence of peer pressure, pay and benefits, free time on job/career plans

All respondents were asked to state how important “group or peer pressure” is as an influence on their decisions about what type of careers or jobs to pursue:

very important	20%	52% Total
somewhat important	32	IMPORTANT
somewhat unimportant	18	47% Total
very unimportant	29	UNIMPORTANT
undecided/don't know	1	

When asked how important pay and benefits are as an influence in their career/job decisions, respondents answered:

very important	56%	92% Total
somewhat important	36	IMPORTANT
somewhat unimportant	5	7% Total
very unimportant	2	UNIMPORTANT
undecided/don't know	1	

Respondents were then asked, “How important do you think having enough free time for family and recreational pursuits is as an influence in your decisions about what type of careers or jobs to pursue ... ?”:

very important	60%	94% Total IMPORTANT
somewhat important	34	
somewhat unimportant	4	5% Total UNIMPORTANT
very unimportant	1	
undecided/don't know	1	

Ranking employer-provided benefits

A list of employer benefits was read, and respondents were asked to rate each from most to least important:

	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	<u>5th</u>	<u>6th</u>
health insurance	44%	29%	12%	7%	5%	3%
dental insurance	12	21	28	22	10	7
a retirement plan	29	19	13	10	16	13
family leave time	23	12	15	18	20	12
vacation time	13	13	21	18	19	16
the location of the company	18	14	13	13	14	28

Agreement with career/job statements

Several statements were read, and respondents were asked to indicate if they agree or disagree with each:

			AGREE		DISAGREE		undec
	<i>strongly</i>	<i>somewhat</i>	Total	<i>somewhat</i>	<i>strongly</i>	Total	
The best jobs and careers require at least a four-year college education	46%	22%	68%	21%	10%	31%	1%
Although new factories are clean, more modern, and have the latest technology, not many young people want to work in factories because most of them are still dirty and poorly lit	18	26	44	35	17	52	4
There are plenty of good paying high-tech jobs available that only require two or three years of job training and pay as much as \$40,000 to \$80,000 per year	33	39	72	16	6	22	6
Even though jobs in the health care industry pay well and offer good benefits, mergers and lay-offs in the health care industry make the future of health care jobs less secure than other jobs	18	22	40	20	30	50	10
There is a sense of embarrassment among many young people associated with vocational job training programs that make them less attractive than four-year college degrees	18	23	41	23	33	56	3
Having training in the use of high-technology equipment and computers in the field they are most interested in pursuing is important today if students are going to have a chance at getting a good paying job	50	39	89	7	2	9	2
Working in a job that requires only two years of vocational training is becoming more acceptable & has much of the same prestige as jobs and careers you get after completing a four-year college degree	24	39	63	17	16	33	4
Students won't work in computer jobs because they are fearful they will be viewed negatively	6	10	16	20	60	80	4
Pursuing tech careers in such areas as computers, manufacturing or health care may provide high paying jobs, but it can also limit the kind of professional careers students can seek in the future	20	25	45	25	24	49	6

Perceived purpose of career/job education

When respondents were asked if people should be educated for a specific job, or to be able to pursue careers in a variety of job areas:

a specific job	20%
a variety of job areas	72
undecided/don't know	8

Consideration of apprenticeship program

All respondents were asked if they would consider a career in manufacturing if a company hired them for an apprenticeship program, paid for their schooling and also paid them while they worked:

definitely consider it	23	72% Total
probably consider it	49	CONSIDER
probably NOT consider it	12	25% Total NOT
definitely NOT consider it	13	CONSIDER
undecided/don't know	3	

Consideration of military service

All respondents were asked if they would consider joining a branch of the military:

definitely consider it	8%	26% Total
probably consider it	18	CONSIDER
probably NOT consider it	19	70% Total NOT
definitely NOT consider it	51	CONSIDER
already joined	1	(volunteered)
undecided/don't know	3	

Those who said they “would consider” or have already joined the military were asked how much of an influence the Sept. 11 attack by terrorists on the World Trade Center and the Pentagon had on their decision to join or consider joining the military:

a very direct influence	24	43% Total
a significant influence	19	DIRECT/SIGNIFICANT
a minor influence	25	57% Total
not an influence at all	32	MINOR/NOT